

In the Claims

1. (currently amended) A centrifugal blower assembly comprising:
a centrifugal impeller adapted to receive air axially and discharge the same radially, an electric motor connected in driving relationship with the impeller,
a scroll diffuser defining ~~at least one~~ a single axial inlet opening for supplying air to the impeller, and at least one scroll section for collecting and discharging air from the impeller, and

at least one partition extending substantially in a radial plane mounted within ~~a~~ the housing with an inner opening receiving and having an edge in close proximity and substantially completely surrounding to the periphery of the centrifugal impeller, said partition serving to divide the scroll interior into at least two discrete axially adjacent flows for the discharge of air from the scroll section, said scroll section comprising at least two discrete scroll sub-sections associated respectively with said at least two axially adjacent flows, and each of said at least two scroll sub-sections being configured to provide different and independently optimized expansion angles.

2. (cancelled).

3. (cancelled).

4. (currently amended) A centrifugal blower assembly as set forth in Claim 1 ~~2~~ wherein said at least two scroll sub-sections have differing configurations of their outer walls, each spaced radially from out facing the periphery of the impeller.

5. (currently amended) A centrifugal blower assembly as set forth in Claim 1 ~~2~~ wherein the axial dimension of at least one of said at least two scroll sub-sections varies as the air proceeds from the impeller to an associated discharge opening.

6. (original) A centrifugal blower assembly as set forth in Claim 5, wherein the manner in which the axial dimensions of said two sub-sections varies is different.

7. (currently amended) A centrifugal blower assembly as set forth in Claim 1 ~~2~~ wherein the centerlines of the flows through the sub-sections differ.

8. (currently amended) A centrifugal blower assembly as set forth in Claim 4, wherein ~~the~~ discharge openings of the two sub-sections are substantially rectangular in cross section and are arranged in a adjacent end-to-end relationship to provide an elongated discharge opening.

9. (currently amended) A centrifugal blower assembly as set forth in Claim 4, wherein ~~the~~ discharge openings of the two sub-sections are arranged in adjacent side-

by-side relationship to provide an aggregate discharge opening of substantially enlarged width.

10. (currently amended) A centrifugal blower assembly as set forth in Claim 4, wherein the discharge openings of the two sub-sections are arranged in angularly spaced apart relationship.

11. (original) A centrifugal blower assembly as set forth in Claim 8, wherein the scroll sub-sections are configured with varying axial dimensions and at least one sub-section is displaced axially as it approaches its discharge opening to provide for an aggregate elongated discharge opening having substantially a common longitudinal centerline.

12. (currently amended) A centrifugal blower assembly as set forth in Claim 1 2, wherein said at least two scroll sub-sections have cut-off points substantially at the same point circumferentially along the periphery of the impeller opening in the partition.

13. (currently amended) A centrifugal blower assembly as set forth in Claim 1 2, wherein said at least two scroll sub-sections have cut-off points spaced circumferentially from each other.

14. (currently amended) A centrifugal blower assembly as set forth in Claim 1 2, wherein said at least two scroll sub-sections have discharge openings with substantially parallel centerlines.

15. (currently amended) A centrifugal blower assembly as set forth in Claim 1 2, wherein said at least two scroll sub-sections have discharge openings with centerlines angularly related to each other.

16. (original) A centrifugal blower assembly as set forth in Claim 1, wherein said edge of said inner opening in said partition takes a thin rounded configuration facing the impeller.

17. (original) A centrifugal blower assembly as set forth in Claim 16, wherein said edge is inclined gradually outwardly on opposite sides from said rounded configuration to the full thickness of the partition.

18-20. (cancelled).

21. (original) A centrifugal blower assembly as set forth in Claim 1, wherein a flow balancing restriction is incorporated in at least one of said scroll sub-sections.